

REMARKS

Claims 1 – 5, 7, 8 and 13 - 19 are pending in the present application. Claims 6 and 9 – 12 were previously canceled.

On page 2 of the Office Action, claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Applicants amended claim 1 to address this issue. Reconsideration and withdrawal of the rejection are respectfully solicited.

On page 3 of the Office Action, claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,949,801 to Tayebati (hereinafter "the Tayebati patent"). Applicants respectfully traverse this rejection.

Claim 13 provides a laser source. The laser source includes, *inter alia*, (a) a laser medium that emits a laser beam into a cavity, (b) a curved mirror, at an end of the cavity, that reflects said laser beam back towards the laser medium, and (c) a lens that focuses the laser beam onto the curved mirror.

The Tayebati patent, FIG. 1, discloses a concave mirror 30 and a lens 70. The Office Action suggests that concave mirror 30 and lens 70 are descriptive of the curved mirror and the lens, respectively, of claim 13. However, the Tayebati patent states that lens 70 focuses light onto a tunable Fabry-Perot filter 35 (col. 4, lines 7 – 8), and so, lens 70 does not focus light on concave mirror 30. Therefore, the Tayebati patent does not disclose a lens that focuses the laser beam onto the curved mirror, as recited in claim 13. Consequently, the Tayebati patent does not anticipate claim 13.

Applicants respectfully request reconsideration and withdrawal of the section 102(b) rejection of claim 13.

On page 4 of the Office Action, claims 1, 2, 8, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Tayebati patent in view of U.S. Patent No.

5,172,382 to Loh et al. (hereinafter "the Loh et al. patent"). Applicants respectfully traverse this rejection.

Claim 1 provides a laser source. The laser source includes, *inter alia*, (a) a laser medium having a back facet and a front surface, wherein the laser medium emits a laser beam through the front surface into an external cavity, (b) a cavity end mirror that defines a length of the external cavity and reflects the laser beam back towards the laser medium, wherein the cavity end mirror is curved, and (c) a focussing optics that focuses the laser beam on the cavity end mirror.

The Office Action suggests that concave mirror 30 and lens 70 of the Tayebati patent are descriptive of the curved mirror and the focussing optics, respectively, of claim 1. However, as noted above during the discussion of claim 13, in the Tayebati patent, lens 70 does not focus light on concave mirror 30. Therefore, the Tayebati patent does not disclose a focussing optics that focuses a laser beam on a cavity end mirror, as recited in claim 1.

The Office Action does not suggest, and Applicants have not found, that the Loh et al. patent discloses a focussing optics that focuses the laser beam on the cavity end mirror. Applicants therefore submit that the Tayebati and Loh et al. patents, whether considered independently or in combination with one another, neither disclose nor suggest a focussing optics that focuses a laser beam on a cavity end mirror, as recited in claim 1. Thus, claim 1 is patentable over the cited combination of the Tayebati and Loh et al. patents.

Claims 2 and 8 depend from claim 1. By virtue of this dependence, claims 2 and 8 are also patentable over the cited combination of the Tayebati and Loh et al. patents.

Claims 16 and 17 depend from claim 13. Above, Applicants explained that the Tayebati patent does not disclose a lens that focuses a laser beam onto a curved mirror, as recited in claim 13. Applicants respectfully submit that the Loh et al. patent does not

make up for this deficiency. Accordingly, Applicants submit that claim 13, and claims 16 and 17, by virtue of their dependencies, are all patentable over the cited combination of the Tayebati and Loh et al. patents.

Applicants respectfully request reconsideration and withdrawal of the section 103(a) rejection of claims 1, 2, 8, 16 and 17.

On page 5 of the Office Action claims 1, 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,282,215 to Zorabedian et al. (hereinafter "the Zorabedian et al. patent"), in view of U.S. Patent No. 5,673,281 to Byer (hereinafter "the Byer patent") and the Loh et al. patent. Applicants respectfully traverse this rejection.

The Zorabedian et al. patent, FIG. 1A, discloses a retroreflector 122 and a focussing lens 110. The Office Action suggests that retroreflector 122 and focussing lens 110 are descriptive of the cavity end mirror and the focussing optics, respectively, of claim 1. However, the Zorabedian et al. patent states that lens 110 focuses a beam so that the waist portion of the beam, i.e., the portion in which wave forms are substantially planar, lies within an air-gap portion of an etalon 162 (col. 5, lines 35 – 38), and so, lens 110 does not focus the beam on retroreflector 122. Therefore, the Zorabedian et al. patent does not disclose a focussing optics that focuses a laser beam on a cavity end mirror, as recited in claim 1.

The Office Action does not suggest, and Applicants have not found that either of the Byer or Loh et al. patents disclose a focussing optics that focuses a laser beam on a cavity end mirror. Accordingly, Applicants respectfully submit that the Zorabedian et al. Byer, and Loh et al. patents, whether considered independently or in combination with one another, neither disclose nor suggest a focussing optics that focuses a laser beam on a cavity end mirror, as recited in claim 1. Hence, Applicants also submit that claim 1 is patentable over the cited combination of the Zorabedian et al. Byer, and Loh et al. patents.

Claims 3 and 7 depend from claim 1. By virtue of this dependence, claims 3 and 7 are also patentable over the cited combination of references.

Applicants respectfully request reconsideration and withdrawal of the section 103(a) rejection of claims 1, 3 and 7.

On page 6 of the Office Action, claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Zorabedian et al. patent in view of the Byer and Loh et al. patents, and further in view of U.S. Patent No. 6,081,539 to Mattori et al. (hereinafter "the Mattori et al. patent"). Applicants respectfully traverse this rejection.

Claims 4 and 5 depend from claim 1. Above, Applicants explained that none of the Zorabedian et al., Byer, or Loh et al. patents disclosed a focussing optics that focuses a laser beam on a cavity end mirror. The Office Action does not suggest, and Applicants have not found, that the Mattori et al. patent discloses this feature. As such, Applicants submit that claim 1 is patentable over the cited combination of the Zorabedian et al., Byer, Loh et al. and Mattori patents, and that claims 4 and 5, by virtue of their dependencies, are also patentable over this cited combination of references.

Applicants respectfully request reconsideration and withdrawal of the section 103(a) rejection of claims 4 and 5.

On page 8 of the Office Action, claims 13 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Zorabedian et al. patent in view of the Byer patent. Applicants respectfully traverse this rejection.

The Office Action suggests that retroreflector 122 and focussing lens 110 are descriptive of the curved mirror and the lens, respectively, of claim 13. However, as noted above during a discussion of claim 1, in the Zorabedian et al. patent, lens 110 does

not focus the beam on retroreflector 122. Therefore, the Zorabedian et al. patent does not disclose a lens that focuses a laser beam onto a curved mirror, as recited in claim 13.

The Office Action does not suggest, and Applicants have not found, that the Byer patent discloses a lens that focuses a laser beam onto a curved mirror. Accordingly, Applicants submit that the Zorabedian et al. and Byer patents, whether considered independently or in combination with one another, neither disclose nor suggest a lens that focuses a laser beam onto a curved mirror, as recited in claim 13. Thus, Applicants also submit that claim 13 is patentable over the cited combination of the Zorabedian et al. and Byer patents.

Claim 14 and 15 depend from claim 13. By virtue of this dependence, claims 14 and 15 are also patentable over the cited combination of the Zorabedian et al. and Byer patents.

Applicants respectfully request reconsideration and withdrawal of the section 103(a) rejection of claims 13 – 15.

On page 9 of the Office Action, claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Zorabedian et al. patent in view of the Byer patent, further in view of the Mattori et al. patent. Applicants respectfully traverse this rejection.

Claims 18 and 19 depend from claim 13. Above, Applicants explained that neither of the Zorabedian et al. patent nor the Byer patent disclosed a lens that focuses a laser beam onto a curved mirror, as recited in claim 13. The Office Action does not suggest, and Applicants have not found, that the Mattori et al. patent discloses this feature. Accordingly, Applicants submit that claim 13, and claims 18 and 19, by virtue of their dependencies, are all patentable over the cited combination of the Zorabedian et al., Byer, and Mattori et al. patents.

Applicants request reconsideration and withdrawal of the section 103(a) rejection of claims 18 and 19.

As mentioned above, Applicants amended claim 1 to delete a phrase in order to address a rejection under 35 U.S.C. 112. The amendment to claim 1 is not intended to limit the scope of any term of any of the claims. Therefore, the Doctrine of Equivalents should be available for all of the terms of all of the claims.

In view of the foregoing, Applicants respectfully submit that all claims presented in this application patentably distinguish over the prior art. Accordingly, Applicants respectfully request favorable consideration and that this application be passed to allowance.

Respectfully submitted,

12-21-04

Date


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